DOCUMENT RESUME

ED 164 991 08 CE 019 677

AUTHOR Hartz, John D.
TITLE The Systems Approach to Assessment and Evaluation of Post-Secondary Vocational Education Programs. Final Report. October 1, 1976-June 30, 1978.
INSTITUTION Wisconsin Univ., Madison. Wisconsin Vocational Studies Center.
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C.
BUREAU NO 498AH60183
PUB DATE Jul 78
GRANT G007604945
NOTE 13p.; For related documents see CE 019 678 and CE 019 680-681
AVAILABLE FROM Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 964 Educational Science Building, 1025 West Johnson Street, Madison, Wisconsin 53706 ($3.00)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Career Planning; Construction (Process); *Employment Qualifications; Information Dissemination; *Interpersonal Competence; Job Applicants; *Job Placement; Job Search Methods; Postsecondary Education; *Program Improvement; Student Evaluation; Success Factors; Surveys; Systems Approach; *Tenure; Test Construction; *Vocational Education; Work Attitudes
IDENTIFIERS Wisconsin

ABSTRACT

A project was conducted to improve the employability and employment prospects for students by (1) identifying non-job task skills and characteristics important to job acquisition and retention, (2) constructing an instrument to assess the identified skills and characteristics, (3) pilot testing the instrument with graduates from two postsecondary vocational technical institutions, one urban and one rural, in Wisconsin, (4) writing up the results with suggestions regarding further use of the instrument, (5) determining future research and development needs, and (6) disseminating information and products. Some of the methods used to accomplish the objectives were a literature review to identify skills and characteristics important for job acquisition and retention, surveys of graduates, employers, and school staff responsible for placement to verify and expand the findings of the literature review, and a search and review of existing tests and inventories. Project staff developed the following products: "Job Seeking and Job Keeping: An Annotated Bibliography," "A User's Guide to Selected Published Tests in Career Education and Career Guidance," "Employability: Review and Survey," "Employability Inventory," "Employability Inventory: User's Guide," and an "Employability Inventory: Findings and Analyses." (CSS)

ED164991

Final Report

October 1, 1976 to June 30, 1978

Project Number 498AH60183

Grant Number G007604945

John D. Hartz
Wisconsin Vocational Studies Center
321 Old Education Building
1000 Bascom Mall
University of Wisconsin
Madison, Wisconsin 53706

The Systems Approach to Assessment And Evaluation of Post-Secondary Vocational Education Programs

July 1978

U.S. Department of Health Education & Welfare
Office of Education
Bureau of Occupational & Adult Education

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CE 019 677

Project Staff

Merle E. Strong - Center Director
John D. Hartz - Project Director
Carol Kowle - Project Associate
M. Douglas Ray - Project Associate
Donald Steele - Project Associate
Susan Kosmo - Project Specialist
Jan Novak - Project Specialist
Barbara Smisko - Project Assistant
Eleanor Wong - Project Assistant
Merle Stephey - Project Assistant

The Systems Approach

FINAL REPORT

Contents

1. Major Activities and Accomplishments
2. Problems
3. Dissemination Activities
4. Capital Equipment Acquisitions
5. Data Collection
6. Other Activities
7. Staff Utilization
8. Activities Planned for Next Reporting Period
9. Attachments

The Systems Approach

Final Report

Project # 498AH60183

Grant # G007604945

Title: The Systems Approach to Assessment and Evaluation of Post-Secondary Vocational Education Programs

Grantee Organization: The Wisconsin Vocational Studies Center, UW-Madison

Project Director: John D. Hartz

Period Covered: October 1, 1976 - June 30, 1978

1. Major Activities and Accomplishments:

Goals & Objectives

The primary purpose of this project was to contribute to post-secondary education's goal of improving the employability and employment prospects for students by fulfilling the following objectives: (1) identifying the non-job task skills and characteristics important to job acquisition and retention; (2) constructing an instrument to assess the identified skills and characteristics; (3) pilot testing the instrument with graduates from two post-secondary vocational technical institutions, one urban and one rural, in Wisconsin; (4) writing up the results with suggestions regarding further use of the instrument in practice; (5) determining future research and development needs; and (6) disseminating information and products.

Procedures

To accomplish the objectives described above the following activities were completed:

A. A thorough review of scholarly research and writing as well as of commercial guides to employability were conducted. This

phase of the project entailed use of both computerized and manual search strategies. The purpose for this phase was to determine the state of the art and to identify the skills and characteristics deemed important to job acquisition and retention.

B. As the literature and research search and review was being completed, the identified skills and characteristics were used to construct open-ended survey instruments. These were used in surveys of graduates, employers and school staff responsible for placement to verify and expand on skills and characteristics identified in the literature search and review.

C. Concomitantly, a search and review of existing tests and inventories was conducted to determine whether or not existing instruments or methodologies could be employed to accomplish the goal of the project.

D. Following the literature and test reviews and the surveys, an instrument using vignettes to describe work situations and providing alternate responses for the testee to select, was constructed. A brief, limited content validation was conducted. This was followed by a preliminary pilot test with current students at a local post-secondary vocational technical school. These preliminary pilot testings were done to "clean up" the language, determine testing procedures and times, and establish protocols.

E. The major phase of the project entailed administering the research edition of the instrument to graduates and current students from two post-secondary institutions in Wisconsin. These institutions were deliberately diverse. One was located in rural Southwestern Wisconsin, the other was located in the only major metropolitan center in the state. All graduates during the previous two academic years were sent instruments for completion along with an attached questionnaire for important demographic data. Current students were also asked to complete both the questionnaire and the inventory. Data from each of these populations was collated and coded.

F. All completed instruments and questionnaires were coded, key punched and sent for data processing. Analysis of the data required various groupings of respondents post hoc. Comparisons of respondents were made by employment status, general program areas of training, locale of training, sex, and experience. In addition, further combined analyses were made looking at a combination of program areas of training and employment status. Current student responses were compared with those of employed related graduates from the same general training program areas. Data from the comparison was written up and tabularized.

G. Results from both the literature review and the pilot testing were used to construct a User's Guide to the inventory.

Products

In completing the tasks described above project staff have developed the following products:

1. Job Seeking and Job Keeping: An Annotated Bibliography. This consists of an annotated bibliography of commercial literature, curriculum materials, and job seeking guides which staff used in a preliminary search for job-related materials. A range of materials for a variety of audiences is included. Low literate adults, high school students, executive job-seekers, the unemployed, and post-secondary and college graduates are among the groups covered. The types of materials range from extensive audio-visual programs to local curriculum guides.

2. A User's Guide to Selected Published Tests in Career Education and Career Guidance. This handbook contains a synopsis of the technical data on a variety of tests and inventories used in career assessment. The test abstracts provided include a description of the components of the tests, norms used, coefficients of reliability and validity and the advantages of uses of the tests. The tests are grouped in three categories: (1) career/vocational education; (2) personality inventories, and; (3) measurement inventories relevant to industrial settings. This publication also contains an index of the various publishing firms and addresses from which materials can be ordered.

3. Employability: Review and Survey. This publication contains a summary of the literature and research review conducted in order to identify personal/social skills and characteristics important

to getting and keeping jobs. Also included are the results obtained from surveys conducted with employees who were graduates of post-secondary vocational technical programs, employees who hire post-secondary vocational school graduates, and post-secondary vocational school staff responsible for assisting graduates in obtaining placements. The combination of the literature and research review and the surveys provided the basic data needed to construct the "Employability Inventory," an instrument designed to assess personal/social skills important for job acquisition and retention.

4. Employability Inventory. This inventory is a 70 item assessment instrument designed to assess the skills important to job getting as well as the characteristics important to job maintenance and advancement. It consists of a series of vignettes which describe situations job seekers and job holders have or might encounter. Testees are asked to select the alternative incorporating the course of action they believe would be most appropriate for the person and situation described in the vignette.

5. Employability Inventory: User's Guide. This handbook contains the key to responses to the Employability Inventory. Responses most frequently selected by those who were fully employed in jobs related to training are reported. Also provided is a brief discussion of the issues incorporated in each vignette. Discussions include points to consider as well as suggestions for prospective job seekers. It is designed to be used either as a self scoring guide or as a teaching/learning tool.

6. Employability Inventory: Findings and Analyses. This lengthy report consists of a background and discussion of the methods used to design the Employability Inventory as well as results obtained from field testing it with graduates from and current students at two post-secondary Vocational Technical Institutions in Wisconsin. Results obtained are reported in number and percentage distribution tables along with results of statistical procedures used in analyzing reports.

Analyses presented consist of comparisons between various groupings of the field test subjects. Graduate subjects were grouped and compared accorling to:

a) employment status

b) program area completed

c) rural or urban locale

d) sex

e) experience (age)

Comparisons were also made between the responses of current students and those of successfully employed graduates from the same general programs.

This report concludes with a discussion of the findings, suggestions for further research, and, possible implications for practicioners.

2. Problems:

A. Completion of the project entailed continued cooperation from two post-secondary Vocational Technical Institutions in Wisconsin. It was necessary for Center project staff to rely on staff from the two schools to: 1) conduct the surveys with placement staff, employees and graduates, and 2) administer the "Employability Inventory" to current students. Providing this assistance on

the project was secondary to their regular duties. Consequently, results of both the surveys and the current student field tests were received significantly later than scheduled. This delayed the completion of both "Employability: Review & Survey" and "Employability Inventory."

Findings & Analyses reports.

B. The Wisconsin Survey Research Lab performed the key punching and processing of results from the field test administrations of the "Employability Inventory." They encountered programming problems. Consequently, additional delays occurred. The late receipt of "clean" data prevented further cross tabs and in-depth analysis of the findings from the field test administrations.

C. During the course of the project, extensive staff turnover repeatedly occurred. This required repeated orientation to training of new staff.

3. Dissemination:

A. Quarterly newsletters were completed and mailed out during the first 18 months of the project. These were sent out nationwide to both leaders in vocational education and people indicating an interest in the project.

B. Project staff followed a policy of presenting interim findings at state, regional, and national conferences and conventions.

Regional presentations were made at the:

AERA Conference in Cedar Rapids, Iowa.
AERA Conference in Columbus, Ohio.

National presentations were made at the:

AVA Convention in Dallas, Texas
APGA Convention in Washington, D.C.
AERA Convention in Toronto
EPDA National Conference on "Career Education, Career Guidance & Occupational Competence" in Madison, Wisconsin
EPDA Conference on "Improving the Preparation of Job Placement Personnel" in Madison, Wisconsin

C. Project products are bieng advertized in WVSC brochures along with other Center products related to Guidance and Placement.

D. Copies of project reports and handbooks have been, and are being, distributed by the WVSC's Publications on a cost recovery basis.

4. Capital Equipment Acquisitions: None

5. Data Collection:

Three separate sets of data were collected during the conduction of the project. These included:

A. Survey data on factors important in job acquisition and retention from employers, graduates, and staff responsible for placement at the two cooperating post-secondary vocational education institutions,

B. Field Test results from an administration of the "Employability Inventory" to graduates of two cooperating post-secondary Vocational Technical Institutions, and

C. Field test results with current students at the two cooperating schools.

Surveys were done using a structured interview format by staff at the cooperating schools. The purpose of the interviews was to gain in-depth information to cross validate or expand on those factors important to job acquisition and retention as identified from a prior search and review of literature and research. Results were used along with the review as the basis for construction of the "Employability Inventory." (see Employability: Review & Survey for both details of the literature and research search and review as well as results of the graduate, employer and staff surveys; see Employability Inventory: Findings & Analyses for details of construction of the inventory.)

The first field test was conducted using 1976-76 and 76-77 graduates from both Southwest Tech at Fennimore and Milwaukee Area Technical College. Using lists supplied by the schools, Center project staff mailed copies of various forms of the "Employability Inventory" to all graduates. Included was a questionnaire to obtain demographic data deemed important for analysis. Completed inventories were obtained from 54% of the graduates for whom good addresses were obtained. Respondents were grouped in various ways for comparative and analytic purposes. Groupings and comparisons were made on the basis of:

a) employment status

b) program area completed

c) locale of training

d) sex

e) experience (age)

Details regarding both this administration and the results obtained from the comparisons are reported in Employability Inventory: Findings & Analyses.

The second field test was conducted with current students at the two schools. The complete inventory was administered to students scheduled to graduate in Spring-Summer 1978 by school staff. Completed inventories were mailed to Center project staff for analyses. Current student respondents were grouped by locale and program area. Their responses were compared to those of successfully employed graduates from the same programs at that locale (see Employability Inventory: Findings & Analyses for a detailed report on the findings).

6. Other Activities:

Center project staff have been involved in other related projects. Results of the Literature & Research Review as well as the surveys have greatly aided successful completion of those projects. In addition to the research uses of the inventory, it has been and is being used by high school and post-secondary staffs in courses taught on employability skills and occupational orientation.

7. Staff Utilization:

As mentioned previously, staff changeover created problems in completing the project as scheduled. Outside of John Hartz, no staff member remained on the project from its advent to its conclusion.

8. Activities Planned for Next Reporting Period:

Staff involved in the completion of the funded portion of the project hope to continue analysis of the data. It is also planned to revise the inventory based upon data obtained to this point in time. It is hoped that future funding from some source will be made available for continuation of validation efforts.

Staff hope to publish several articles on the results and analyses of the preliminary field tests. Staff are also submitting proposals for future presentations at national conferences.

Preliminary results and the research edition of the inventory have been released to several graduate students in other states. These students have indicated an interest both in this aspect of employment preparation and in doing further research with the instrument.

WISCONSIN VOCATIONAL STUDIES CENTER
UNIVERSITY OF WISCONSIN-MADISON

The Wisconsin Vocational Studies Center at the University of Wisconsin-Madison was reorganized with the support of the Wisconsin Board of Vocational, Technical, and Adult Education within the School of Education in 1971. The function of the center is to serve the State of Wisconsin in a unique way by bringing the resources of the University to bear on identified probelms in the delivery of vocational and manpower programs--vocational education, technical education, adult education, career education, and manpower training--to citizens of all ages in all communities of the state. The center focuses upon the delivery of services including analyses of need, target groups served, institutional organization, instructional and curriculum methodology and content, labor market needs, manpower policy, and other appropriate factors. To the extent that these goals are enhanced and the foci of problems widened to encompass regional and national concerns, the center engages in studies beyond the boundaries of the state.

Merle E. Strong, director
Roger H. Lambert, associate director

for further information contact:

WISCONSIN VOCATIONAL STUDIES CENTER
321 EDUCATION BUILDING
1000 BASCOM MALL
MADISON, WISCONSIN 53706

608-263-3696